

FIG. 1

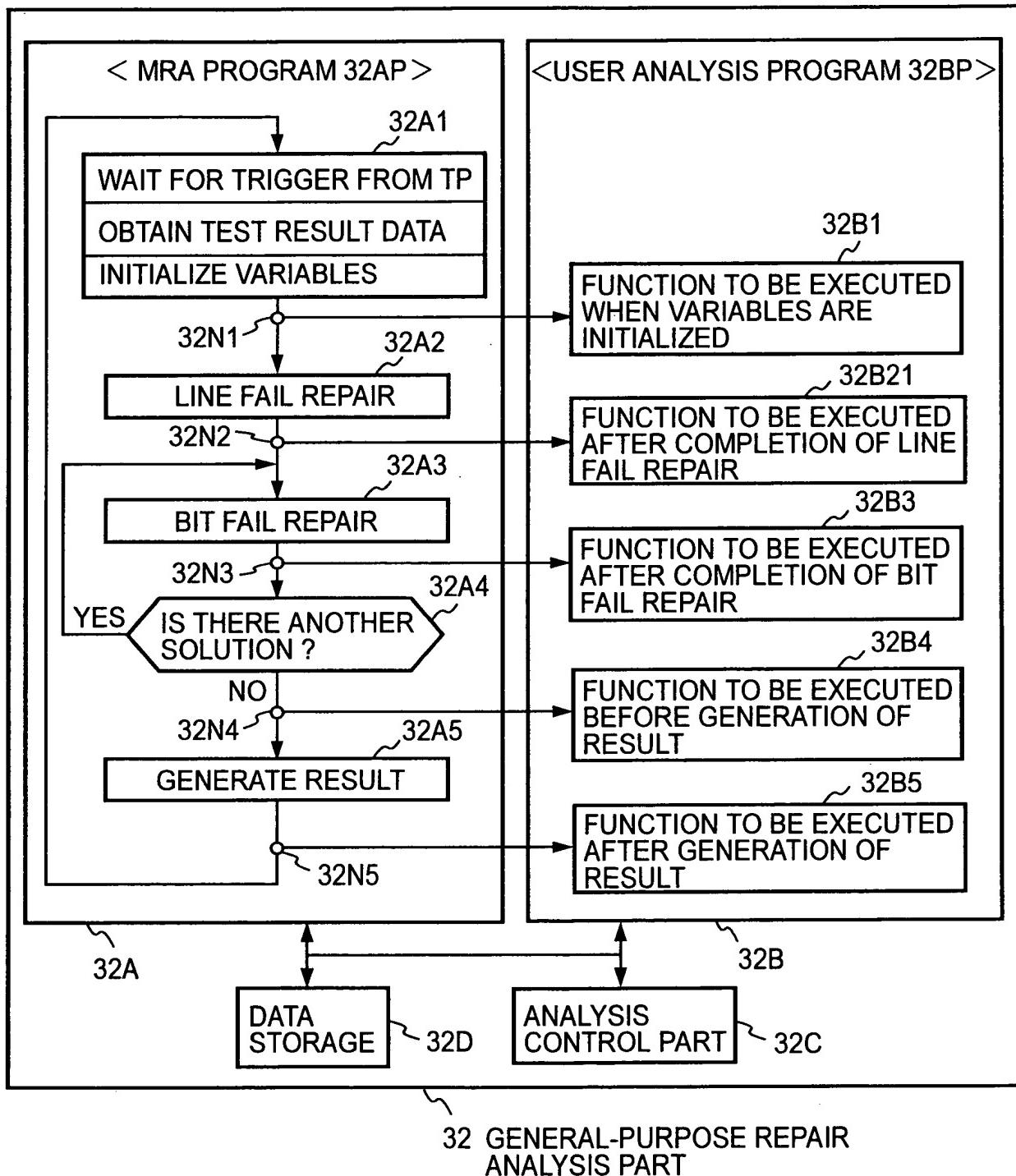


FIG. 2

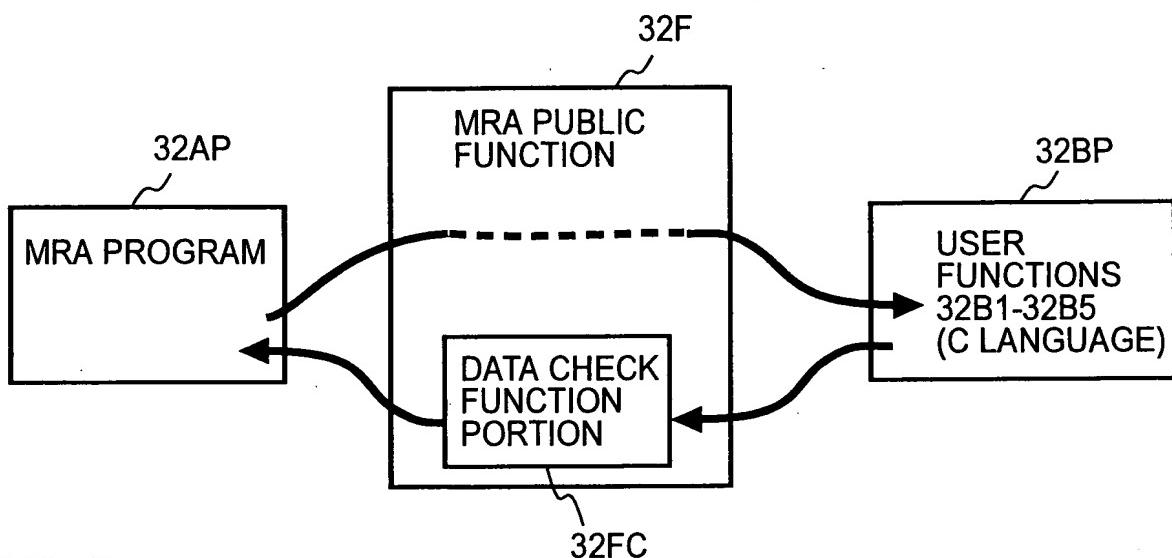


FIG. 3

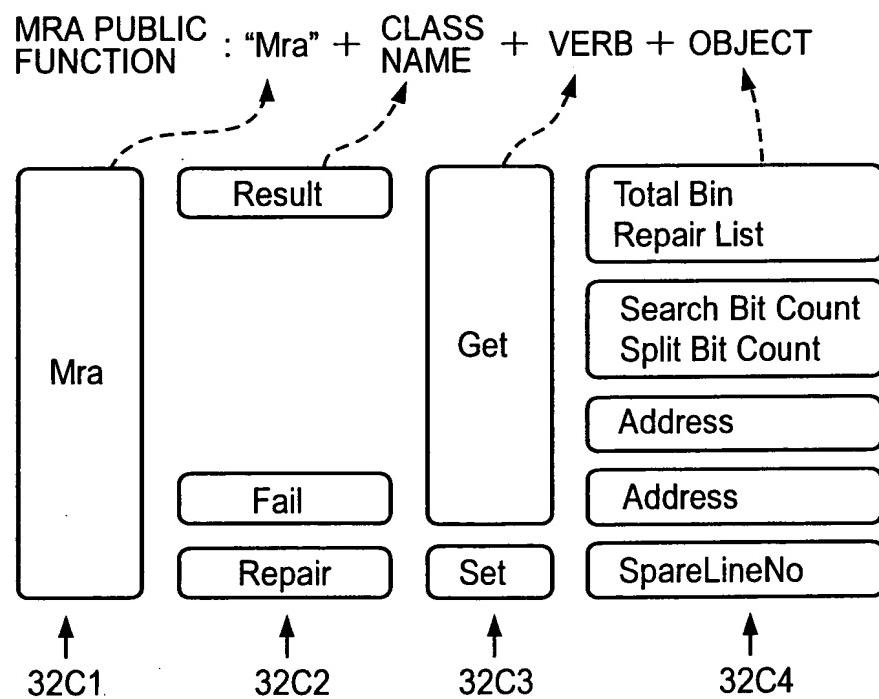


FIG. 4

FIG. 5

```

1 #include <MraLib.h>

2 static MraRepairId_t RepairIdList[MraSPARELINE_COUNT_MAX];
3 static int compare( const void *a, const void *b)
4 {
5     const MraRepairId_t *A = a, *B = b;
6     int blockA, blockB;
7     uint32_t adrsA, adrsB;
8     MraRepairGetAddress( *A, &blockA, &adrsA);
9     MraRepairGetAddress( *B, &blockB, &adrsB);
10    if ( adrsA < adrsB) return -1 ;
11    if ( adrsA > adrsB) return 1 ;
12    return 0 ;
13 }

14 static MraStatus_t addressCheckRow(int blockGroupNo, MraDir_t dir)
15 {
16     MraRepairId_t *repairId = RepairIdList ;
17     int blockNo0, blockNo1 ;
18     uint32_t address0, address1;
19     int i, count ;
20     count = MraBlockGroupGetRepairList ( blockGroupNo, dir,
21                                         repairId, MraSPARELINE_COUNT_MAX) ;
22     MraQsort( repairId, count, sizeof(MraRepairId_t), compare) ;
23     for (i=0 ; i<count-1; i++)
24         MraRepairGetAddress( repairId[ i ], &blockNo0, &address0) ;
25         MraRepairGetAddress( repairId[ i+1], &blockNo1, &address1) ;
26         if ( address0 == address1) return MraNG ;
27     }
28     return MraOK ;
29 }

30 MraStatus_t SampleRuleCheck1(void *clientdata)
31 {
32     int blockGroupNo ;
33     blockGroupNo = MraGetBlockGroupNo( );
34     if( addressCheckRow ( blockGroupNo, MraDIR_ROW) != MraOK) return MraNG ;
35     return MraOK ;
36 }

37 int UserSetup ( void )
38 {
39     MraSetUserFunc("SAMPLE_RULE_CHECK1", MraPOINT_POST_REPAIR
40     _LINEFAIL, SampleRuleCheck1,
41             NULL );
42     MraSetUserFunc("SAMPLE_RULE_CHECK1", MraPOINT_POST_REPAIR
43     _BITFAIL, SampleRuleCheck1,
44             NULL );
45     return 0 ;
46 }

```

The diagram consists of four vertical curly braces on the right side of the code, each labeled with a unique identifier:

- UF1**: Brackets the entire block of code from line 2 to line 13.
- UF2**: Brackets the entire block of code from line 14 to line 29.
- UF3**: Brackets the entire block of code from line 30 to line 75.
- UF4**: Brackets the entire block of code from line 76 to line 94.

FIG. 6

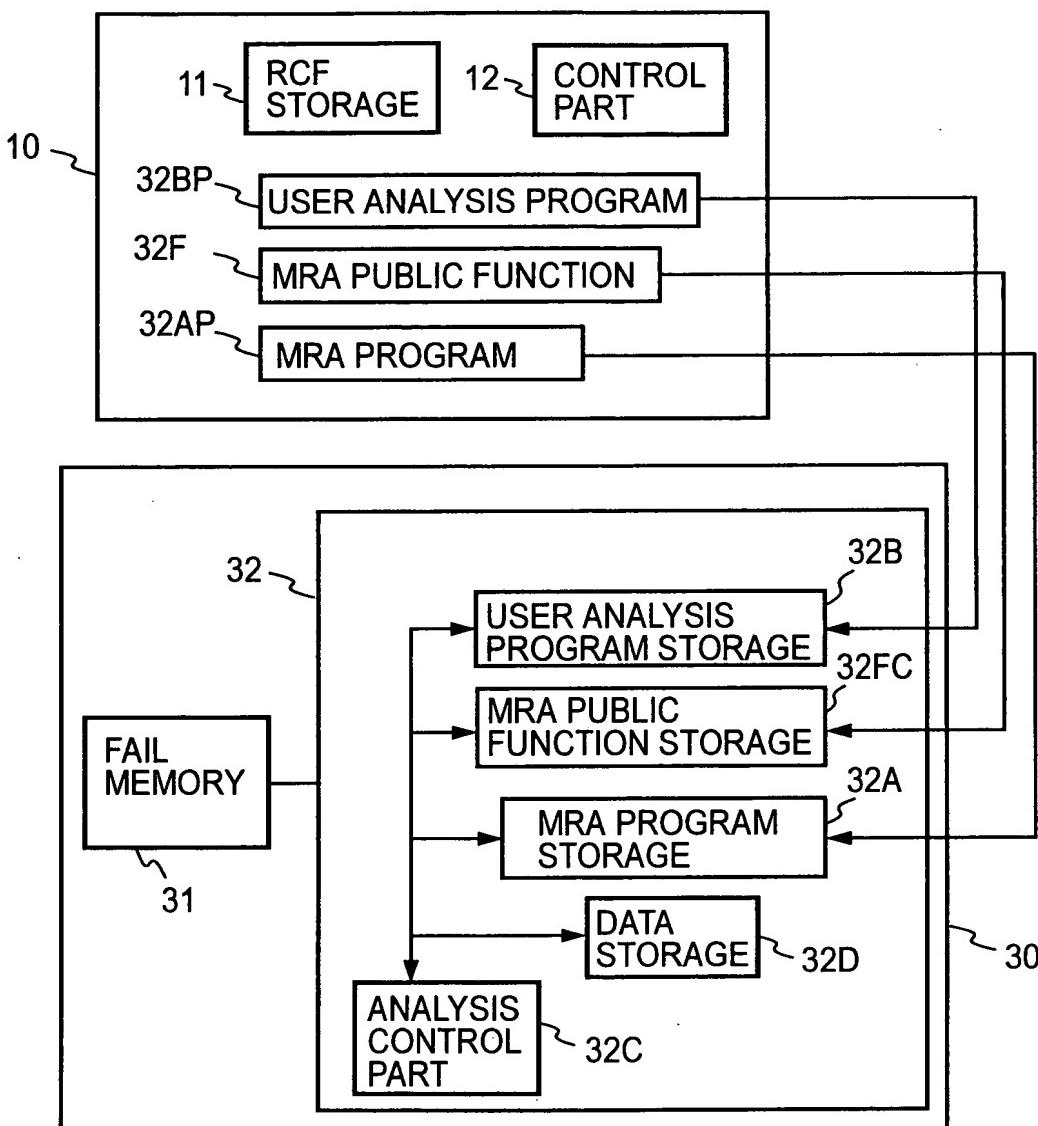


FIG. 7

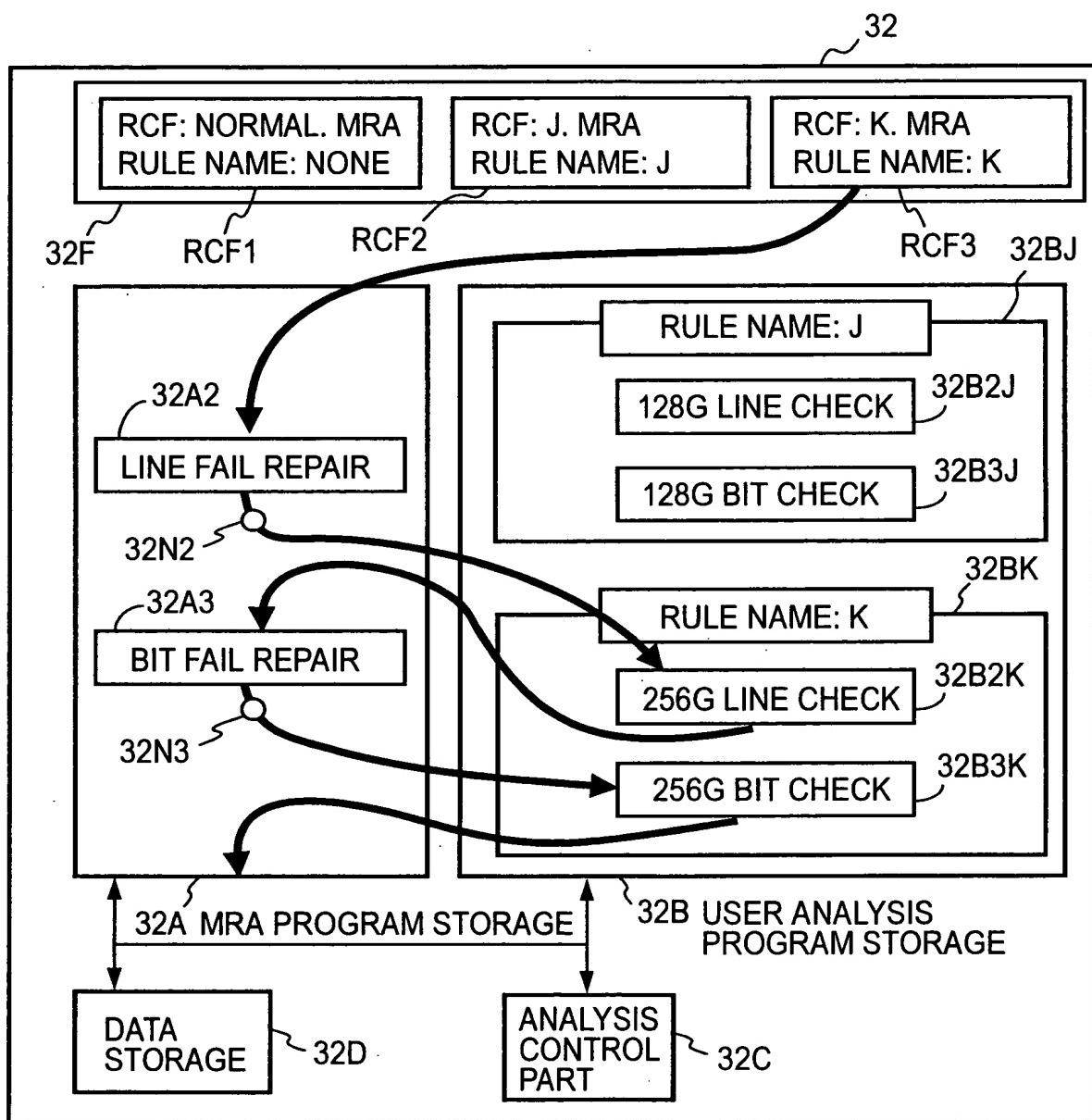


FIG. 8A

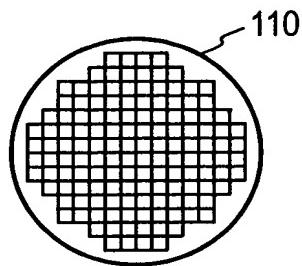


FIG. 8B

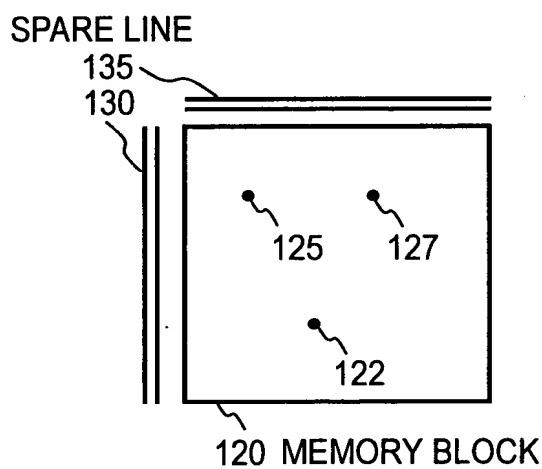


FIG. 8C

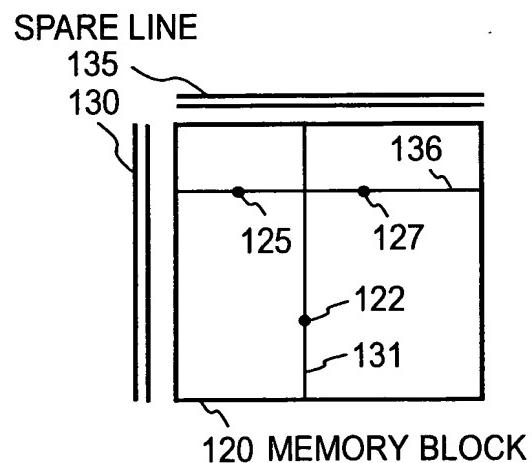


FIG. 9

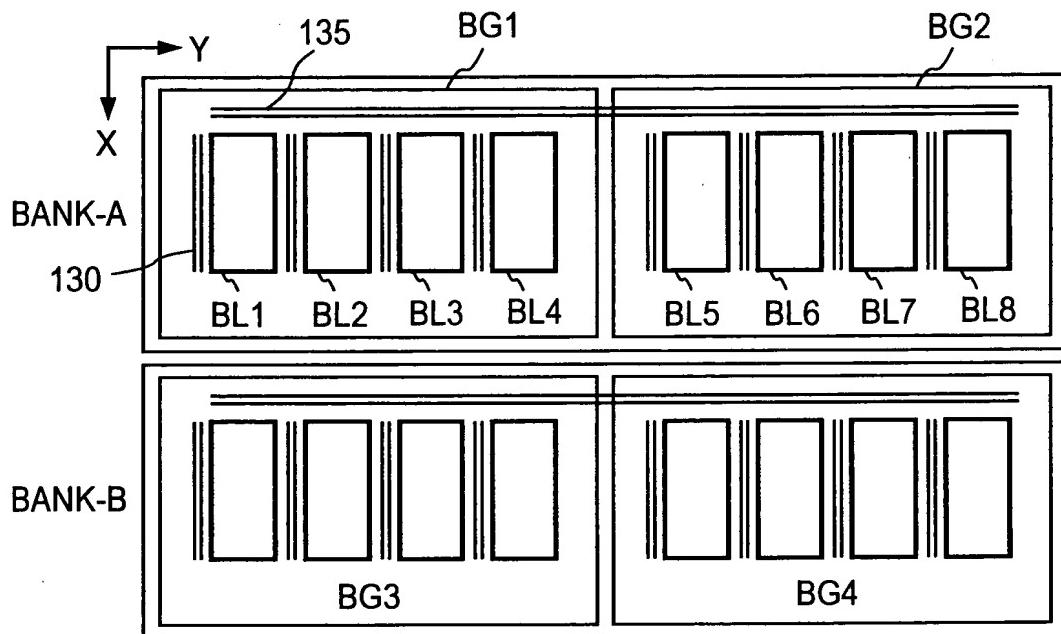


FIG. 10

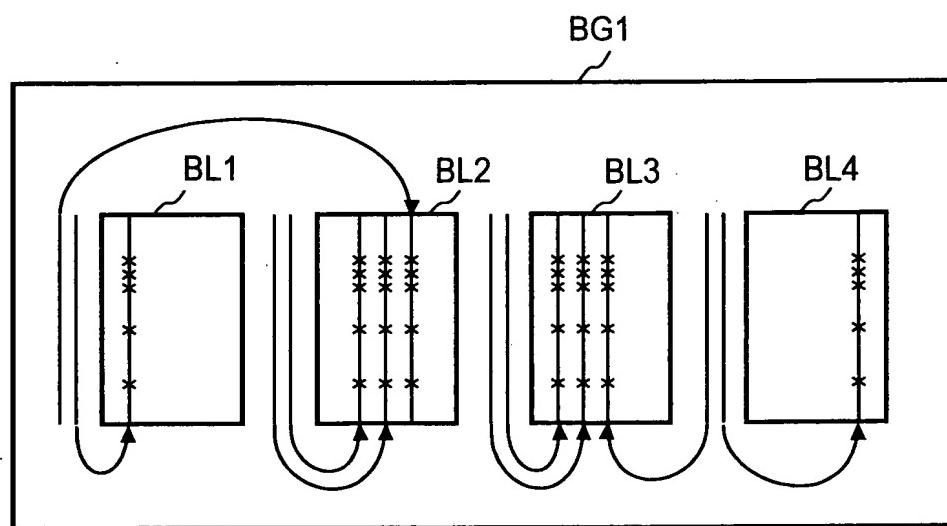


FIG. 11

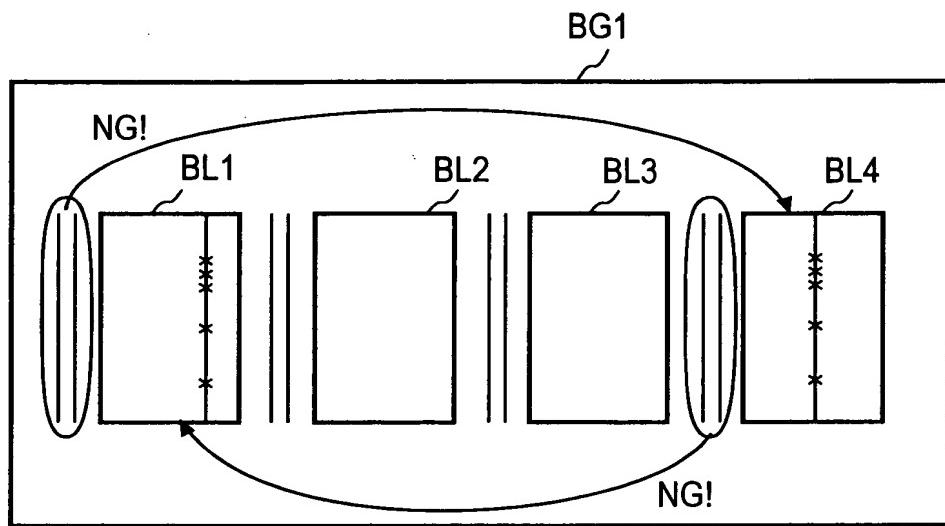


FIG. 12

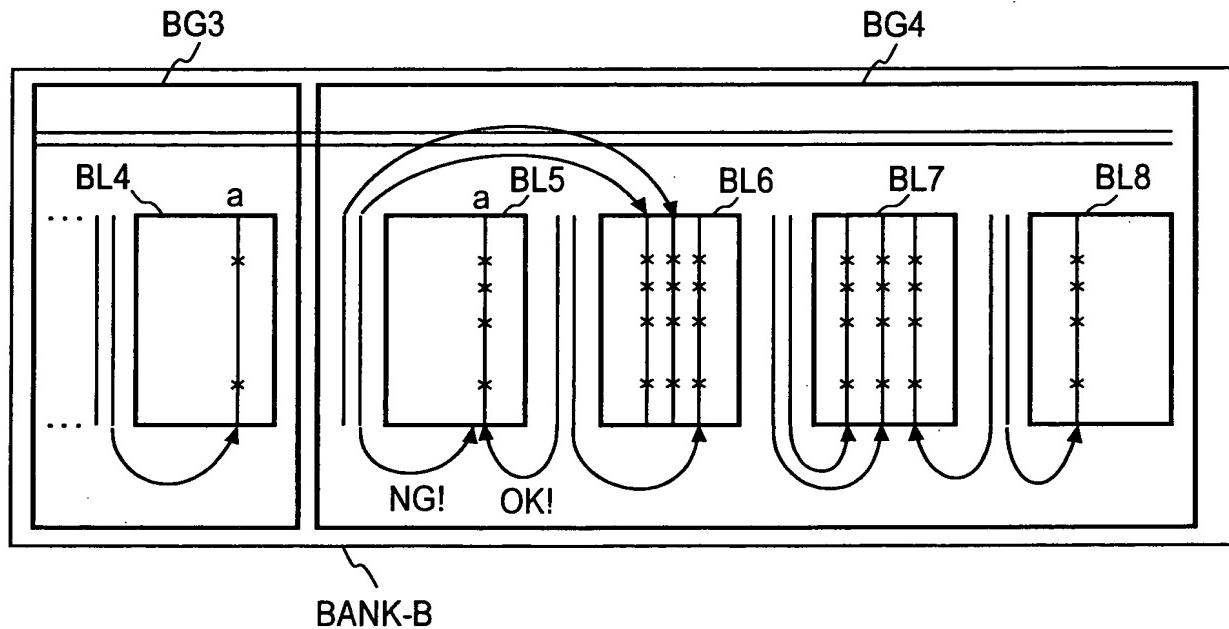


FIG. 13

